Attorney Docket No.: P-7671-US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	MOORE, Jonni et al.	Examiner:	MARTIN, PAUL C
Serial No.:	10/594,620	Group Art Unit:	1657
Filed:	June 27, 2007	Confirmation No.:	5253
Title:	A FLOW CYTOMETRIC METHOD AND KIT FOR METAL-INDUCED SENSITIVITY		

DECLARATION UNDER 37 C.F.R. § 1.132

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

I, Jonni Moore, a citizen of the United States of America, residing at 435 Camden Avenue, Moorestown , NJ 08057 , hereby declare:

1. I received my Ph.D. in Microbiology and Immunology at Thomas Jefferson University.
2. I joined the Department of Pathology and Laboratory Medicine at the University of Pennsylvania in 1984 as a postdoctoral fellow in the laboratory of Peter Nowell.
3. I was appointed to the faculty at Penn in 1992 where I have remained rising to the rank of full professor. I have served as Director of the Flow Cytometry and Cell Sorting Shared Resource since 1991. Further, I was appointed the first director of the Clinical Flow Cytometry Laboratory at the Hospital of the

University of Pennsylvania and developed the first dedicated clinical flow cytometry rotation in pathology residency training programs.

4. I have focused on movement of novel translational assays to the clinical lab, developing new flow cytometric tests in the areas of toxicology, oncology, hematology and cardiology.

5. I have served on several committees of the International Clinical Cytometry Society and the International Society for the Advancement of Cytometry and on the editorial board of Cytometry B, and have been a consultant for several academic and commercial laboratories.

6. I have read the above-identified patent application, of which I am a named inventor, and have reviewed its prosecution history, including the final Office Action of June 11, 2010. The subject application describes, *inter alia,* the use of a cell proliferation marker (CFSE) and a viability marker (TOP-PRO-3) to clinically assess beryllium sensitivity in beryllium-exposed and in normal subjects.

7. Claims 1,3,6,7, 9-12 and 14-27 are pending in this application. These claims are directed to methods for determining beryllium sensitivity of a subject.

8. In the final Office Action dated June 11, 2010, the Examiner rejected claims 1,3, 6,7,9-12, and 14-27 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Fontenot et al. (*The Journal of Clinical Investigation*. 112(5). 2003). ("Fontenot").

9. The Examiner asserts that Fontenot allegedly teaches a method wherein peripheral blood mononuclear cells (PBMCs) and bronchoalveolar lavage (BAL) cells from subjects diagnosed with chronic beryllium disease (CBD) are stained with monoclonal antibodies to CD4, CD8 and CD28 in order to identify the lymphocyte (T-cell) population and contacting the identified BAL T-cell subpopulation with the intracellular protein strain CFSE.

10. Fontenot does not disclose nor suggest using a combination of a viability marker and a cell proliferation marker and therefore would be fatal to the operability of an accurate, clinical assessment of beryllium sensitivity in subjects. As such, Fontenot does not render the present invention obvious.

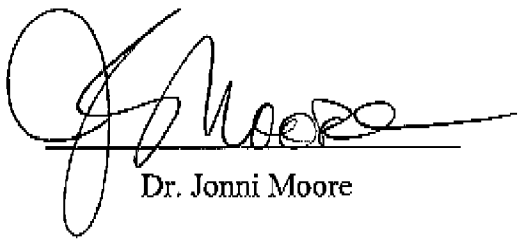
11. Usage of a viability marker allows the exclusion of dead cells and further allows accurate measurement of cell proliferation. Thus the present invention provides a distinct and unexpected advantage over Fontenot. in that it enables accurate clinical assessment of beryllium sensitivity in subjects that have been exposed to beryllium and in normal subjects.

12. Fontenot's purpose was to determine how the function of the BAL cells was impaired by decreased CD28 (See, Fontenot p. 777, top-left paragraph). Hence, Fontenot's purpose was not to determine if there was a predictive response of PBMC to beryllium salt (as measured by CFSE) as a disease indicator, as demonstrated by the present invention (see paragraphs 0096-0099).

13. In summary, Fontenot does NOT use CFSE and a viability marker to measure the proliferation of $CD3^+/CD4^+$ peripheral T cells and thus does not address the differences in this response between normal subjects and subjects exposed to beryllium.

I further declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made, are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: December 8, 2010



Dr. Jonni Moore